

General

Title

Medication management for people with asthma: percentage of members 5 to 85 years of age during the measurement year who were identified as having persistent asthma and who were dispensed an asthma controller medication that they remained on for at least 50% of their treatment period.

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of members 5 to 85 years of age during the measurement year who were identified as having persistent asthma and who were dispensed an asthma controller medication that they remained on for at least 50% of their treatment period.

Note: This measure requires that separate age ranges be reported for Medicaid and Medicare product lines. For Medicaid, report only members 5 to 64 years of age. For Medicare, report only members 18 to 85 years of age. Refer to the original measure documentation for details.

Rationale

Appropriate medication adherence could ameliorate the severity of many asthma-related symptoms (Akinbami et al., 2009). According to the Asthma Regional Council, two-thirds of adults and children who display asthma symptoms are considered "not well controlled" or "very poorly controlled" as defined by clinical practice guidelines (Asthma Regional Council, 2010). Pharmacologic therapy is used to prevent and control asthma symptoms, improve quality of life, reduce the frequency and severity of asthma exacerbations, and reverse airflow obstruction (National Heart Lung and Blood Institute & National Asthma Education and Prevention Program, 2007).

Evidence for Rationale

Akinbami LJ, Moorman JE, Garbe PL, Sondik EJ. Status of childhood asthma in the United States, 1980-2007. *Pediatrics*. 2009 Mar;123 Suppl:S131-45. [PubMed](#)

Asthma Regional Council. Living with asthma in New England: results from the 2006 BRFSS and call-back survey. [internet]. 2010 [accessed 2011 May 26].

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Heart Lung and Blood Institute, National Asthma Education and Prevention Program. Measures of asthma assessment and monitoring: expert panel report 3: guideline for the diagnosis and management of asthma. Washington (DC): National Heart Lung and Blood Institute (NHLBI); 2007 Aug.

Primary Health Components

Persistent asthma; controller medication; medication management

Denominator Description

Members 5 to 85 years of age by December 31 of the measurement year with persistent asthma (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

The number of members who achieved a proportion of days covered (PDC) of at least 50% for their asthma controller medications during the measurement year (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed

Additional Information Supporting Need for the Measure

- Asthma is a treatable, reversible condition that affects more than 25 million people in the United States. Managing this condition with appropriate medications could save the United States billions of dollars in medical costs (Centers for Disease Control and Prevention [CDC], 2011).
- The United States spent approximately \$56 billion on total medical costs for asthma in 2007, a 6 percent increase from 2002 (CDC, 2011).
- In 2010, 25.7 million Americans had asthma: 7 million children, 15.6 million adults under 65 and 3.1 million adults 65 and older (Akinbami et al., 2012).
- Asthma is responsible for 3,000 deaths annually (American Lung Association [ALA], 2012).
- More than 53 percent of asthmatic patients had an asthma attack in 2008 (CDC, 2011). In 2009, there were 479,300 asthma-related hospitalizations and 1.9 million asthma related emergency room (ER) visits (CDC, 2013).
- The prevalence and cost of asthma have increased over the past decade, demonstrating the need for better access to care and medication. Appropriate medication management for patients with asthma could reduce the need for rescue medication—as well as the costs associated with ER visits, inpatient admissions and missed days of work or school.

Evidence for Additional Information Supporting Need for the Measure

Akinbami LJ, Moorman JE, Bailey C, Zahran HS, King M, Johnson CA, Liu X. Trends in asthma prevalence, health care use, and mortality in the United States, 2001-2010. NCHS Data Brief. 2012 May;(94):1-8. [PubMed](#)

American Lung Association (ALA). Asthma and children fact sheet. [internet]. Chicago (IL): American Lung Association (ALA); 2012 Oct [accessed 2015 Aug 04].

Centers for Disease Control and Prevention (CDC). Asthma's impact on the nation: data from the CDC National Asthma Control Program. [internet]. Atlanta (GA): Centers for Disease Control and Prevention (CDC); 2013 [accessed 2014 Jun 09].

Centers for Disease Control and Prevention (CDC). CDC vital signs: asthma in the U.S. [internet]. Atlanta (GA): Centers for Disease Control and Prevention (CDC); 2011 May [accessed 2014 Jun 09].

National Committee for Quality Assurance (NCQA). The state of health care quality 2015. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. 205 p.

Extent of Measure Testing

All HEDIS measures undergo systematic assessment of face validity with review by measurement advisory panels, expert panels, a formal public comment process and approval by the National Committee for Quality Assurance's (NCQA's) Committee on Performance Measurement and Board of Directors. Where applicable, measures also are assessed for construct validity using the Pearson correlation test. All measures undergo formal reliability testing of the performance measure score using beta-binomial statistical analysis.

Evidence for Extent of Measure Testing

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Emergency Department

Hospital Inpatient

Hospital Outpatient

Managed Care Plans

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age 5 to 85 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health

Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

The measurement year and the year prior to the measurement year

Denominator Sampling Frame

Enrollees or beneficiaries

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Institutionalization

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Members 5 to 85 years of age by December 31 of the measurement year with persistent asthma.

Identify members as having persistent asthma who met at least one of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.

- At least one emergency department (ED) visit (ED Value Set), with a principal diagnosis of asthma (Asthma Value Set).

- At least one acute inpatient encounter (Acute Inpatient Value Set), with a principal diagnosis of asthma (Asthma Value Set).

- At least four outpatient visits (Outpatient Value Set) or observation visits (Observation Value Set) on different dates of service, with any diagnosis of asthma (Asthma Value Set) *and* at least two asthma medication dispensing events (refer to Table MMA-A in the original measure documentation for a list of asthma medications). Visit type need not be the same for the four visits.

- At least four asthma medication dispensing events (refer to Table MMA-A in the original measure documentation).

A member identified as having persistent asthma because of at least four asthma medication dispensing events, where leukotriene modifiers or antibody inhibitors were the sole asthma medication dispensed in that year, must also have at least one diagnosis of asthma (Asthma Value Set), in any setting, in the same year as the leukotriene modifier or antibody inhibitor.

Note:

Members must have been continuously enrolled during the measurement year and the year prior to the measurement year.

Allowable Gap: No more than one gap in enrollment of up to 45 days during each year of continuous enrollment. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage during each year of continuous enrollment.

For Medicaid, report only members 5 to 64 years of age. For Medicare, report only members 18 to 85 years of age.

Exclusions

Exclude members who met any of the following criteria:

Members who had any diagnosis from any of the following value sets, any time during the member's history through December 31 of the measurement year:

- Emphysema Value Set

- Other Emphysema Value Set

- COPD Value Set

- Obstructive Chronic Bronchitis Value Set

- Chronic Respiratory Conditions Due to Fumes/Vapors Value Set

- Cystic Fibrosis Value Set

- Acute Respiratory Failure Value Set

Members who had no asthma controller medications (refer to Table MMA-B in the original measure documentation a list of asthma controller medications) dispensed during the measurement year.

Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the [NCQA Web site](#) to purchase HEDIS Volume 2, which includes the Value Set Directory.

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

The number of members who achieved a proportion of days covered (PDC) of at least 50% for their asthma controller medications during the measurement year (refer to Table MMA-B in the original measure documentation for a list of asthma controller medications)

To identify numerator compliance:

Identify the Index Prescription Start Date (IPSD).

To determine the treatment period, calculate the number of days beginning on the IPSD through the end of the measurement year.

Count the days covered by at least one prescription for an asthma controller medication (refer to table MMA-B in the original measure documentation) during the treatment period. To ensure that a days supply that extends beyond the measurement year is not counted, subtract any days supply that extends beyond December 31 of the measurement year.

Calculate the member's PCD.

Sum the number of members whose PCD is greater than or equal to 50% for their treatment period.

Note:

PDC: The number of days that a member is covered by at least one asthma controller medication, divided by the number of days in the treatment period.

Treatment Period: The period of time beginning on the IPSD through the last day of the measurement year.

IPSD: The earliest prescription dispensing date for any asthma controller medication during the measurement year.

Oral Medication Dispensing Event:

One prescription of an amount lasting 30 days or less. To calculate dispensing events for prescriptions longer than 30 days, divide the days supply by 30 and round down to convert. Allocate the dispensing events to the appropriate year based on the date when the prescription is filled.

Multiple prescriptions for different medications dispensed on the same day count as separate dispensing events. If multiple prescriptions for the same medication are dispensed on the same day, sum the days supply and divide by 30.

Inhaler Dispensing Event: All inhalers (i.e., canisters) of the same medication dispensed on the same day count as one dispensing event. Medications with different Drug IDs dispensed on the same day are counted as different dispensing events. Allocate the dispensing events to the appropriate year based on the date when the prescription was filled.

Injection Dispensing Event: Each injection counts as one dispensing event. Multiple dispensed injections of the same or different medications count as separate dispensing events. Allocate the dispensing events to the appropriate year based on the date when the prescription was filled.

Refer to the original measure documentation for additional details.

Exclusions

Unspecified

Value Set Information

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Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Pharmacy data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Description of Allowance for Patient or Population Factors

This measure requires that separate rates be reported for commercial, Medicaid, and Medicare product lines.

For Commercial, ages 5 to 85 as of December 31 of the measurement year. Report five age stratifications and a total rate:

- 5 to 11 years
- 12 to 18 years
- 19 to 50 years
- 51 to 64 years
- 65 to 85 years
- Total

For Medicaid, ages 5 to 64 as of December 31 of the measurement year. Report four age stratifications and a total rate:

- 5 to 11 years
- 12 to 18 years
- 19 to 50 years
- 51 to 64 years
- Total

For Medicare, ages 18 to 85 as of December 31 of the measurement year. Report three age stratifications and a total rate:

- 18 to 50 years
- 51 to 64 years
- 65 to 85 years

Total

The total is the sum of the age stratifications for each product line.

Standard of Comparison

not defined yet

Identifying Information

Original Title

Medication management for people with asthma (MMA).

Measure Collection Name

HEDIS 2016: Health Plan Collection

Measure Set Name

Effectiveness of Care

Measure Subset Name

Respiratory Conditions

Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving

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Core Quality Measures

Accountable Care Organizations (ACOs), Patient Centered Medical Homes (PCMH), and Primary Care

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Oct

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates previous versions:

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

Measure Availability

Source available for purchase from the [National Committee for Quality Measurement \(NCQA\) Web site](#)

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For more information, contact NCQA at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org .

Companion Documents

The following are available:

National Committee for Quality Assurance (NCQA). The state of health care quality 2015.

Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct. 205 p.
National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical update. Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct 1. 12 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org .

NQMC Status

This NQMC summary was completed by ECRI Institute on May 16, 2012.

This NQMC summary was updated by ECRI Institute on April 1, 2013, January 10, 2014, December 9, 2014, and again on January 4, 2016.

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Production

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

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